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(54) Title: RNA INTERFERENCE MEDIATED TREATMENT OF ALZHEIMER'S DISEASE USING SHORT INTERFERING NUCLEIC ACID (siNA)

(57) Abstract: This invention relates to compounds, compositions, and methods useful for modulating beta-secretase (BACE), amyloid precursor protein (APP), PIN-1, presenillin 1 (PS-1) and/or presenillin 2 (PS-2) gene expression using short interfering nucleic acid (siNA) molecules. This invention also relates to compounds, compositions, and methods useful for modulating the expression and activity of other genes involved in pathways of BACE, APP, PIN-1, PS-1 and/or PS-2 gene expression and/or activity by RNA interference (RNAi) using small nucleic acid molecules. In particular, the instant invention features small nucleic acid molecules, such as short interfering nucleic acid (siNA), short interfering RNA (siRNA), doublestranded RNA (dsRNA), micro-RNA (miRNA), and short hairpin RNA (shRNA) molecules and methods used to modulate the expression of BACE, APP, PIN-1, PS-1 and/or PS-2 genes.